

INTERNATIONAL SEARCH REPORT

International Application No

/EP2004/004175

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F01D25/16 F16C32/06 F15B20/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F01D F16C F15B F02C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/009361 A1 (REICHERT ARND ET AL) 24 January 2002 (2002-01-24) paragraph '0043! - paragraph '0045! paragraph '0048! - paragraph '0049! abstract; figures 1-5 ---	1,2,5-9, 11,12
X	DE 23 57 881 A (MANNESMANN MEER AG) 22 May 1975 (1975-05-22) page 2, line 7 -page 4, line 3 figures ---	1,2,5-9, 11
A		3,4,10
X	US 4 915 510 A (ARVIDSSON THOMAS) 10 April 1990 (1990-04-10) column 4, line 56 -column 5, line 40 abstract; figures ---	1-3,8-10
A		5,6,11
	--- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

21 June 2004

Date of mailing of the international search report

29/06/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

O'Shea, G

INTERNATIONAL SEARCH REPORT

International Application No
/EP2004/004175

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 39 26 556 A (RENK AG) 14 February 1991 (1991-02-14) column 1, line 35 -column 2, line 31 abstract; claims 1-4; figures -----	1-3, 5-9
A	US 4 544 285 A (GRAHAM II RICHARD W ET AL) 1 October 1985 (1985-10-01) column 1, line 28 - line 68 column 2, line 58 -column 3, line 44 abstract; figures -----	1, 4-8

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

.../EP2004/004175

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002009361	A1	24-01-2002	WO 0028190 A1 18-05-2000 EP 1131537 A1 12-09-2001 JP 2002529646 T 10-09-2002
DE 2357881	A	22-05-1975	DE 2357881 A1 22-05-1975 FR 2251744 A1 13-06-1975 GB 1485773 A 14-09-1977 NL 7413577 A 21-05-1975 SE 7414316 A 20-05-1975
US 4915510	A	10-04-1990	SE 455431 B 11-07-1988 AT 84855 T 15-02-1993 AU 8271187 A 01-06-1988 DE 3783775 D1 04-03-1993 DE 3783775 T2 13-05-1993 EP 0329698 A1 30-08-1989 FI 892256 A 10-05-1989 JP 2500926 T 29-03-1990 NO 882961 A ,B, 01-07-1988 SE 8604848 A 13-05-1988 WO 8803611 A1 19-05-1988
DE 3926556	A	14-02-1991	DE 3926556 A1 14-02-1991
US 4544285	A	01-10-1985	NONE